

AD-A208 649

# STUDY PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

DECEPTION OPERATIONS: DOCTRINAL SIDE SHOW  
OR  
OPERATIONAL IMPERATIVE?

BY

LIEUTENANT COLONEL JOHN G. HATHAWAY

**DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.**

31 MARCH 1989

DTIC  
ELECTE  
JUN 08 1989  
S E D



U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050

89 6 08 064

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ADA208649

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Deception Operations: Doctrinal Side Show or Operational Imperative?		5. TYPE OF REPORT & PERIOD COVERED Study Project
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) LTC John G. Hathaway		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army War College Carlisle Barracks, PA 17013		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE 31 March 1989
		13. NUMBER OF PAGES 44
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release: distribution is unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Over the last yen years, initiatives at both the Department of Defense and Department of the Army levels have attempted to encourage a resurgence in the art of deception as a sustained war-fighting capability. This has seen an increased emphasis on deception in both U.S. doctrinal literature and in expanded coverage at our professional military institutions. This study seeks to examine the doctrinal foundation and historical perspective of deception operations to determine whether or not they should become an operational imperative at the Operational Level of War, or merely a doctrinal side show		

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

for U.S. Military Forces. In addition, a review of present and future issues, the technological necessities that could impact on our future deception operations, the overriding soviet emphasis on deception, and our current U.S. doctrinal education system will be addressed to provide an answer and recommendations to the question posed by the study title.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

USAWC MILITARY STUDIES PROGRAM PAPER

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

DECEPTION OPERATIONS: DOCTRINAL SIDE SHOW  
OR  
OPERATIONAL IMPERATIVE?

AN INDIVIDUAL STUDY PROJECT

by

Lieutenant Colonel John G. Hathaway, IN  
Professor M. I. Handel  
Project Advisor

**DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.**

U.S. Army War College  
Carlisle Barracks, Pennsylvania 17013  
31 March 1989

# ABSTRACT

AUTHOR: John G. Hathaway, LTC, IN  
 TITLE: Deception Operations: Doctrinal Side Show or Operational Imperative?  
 FORMAT: Individual Study Project  
 DATE: 31 Mar 1989 PAGES: 38 CLASSIFICATION: Unclassified

Over the last ten years, initiatives at both the Department of Defense and Department of the Army levels have attempted to encourage a resurgence in the art of deception as a sustained war fighting capability. This has seen an increased emphasis on deception in both U.S. doctrinal literature and in expanded coverage at our professional military institutions. This study seeks to examine the doctrinal foundation and historical perspective of deception operations to determine whether or not they should become an operational imperative at the Operational Level of War, or merely a doctrinal side show for U.S. Military Forces. In addition, a review of present and future issues, the technological necessities that could impact on our future deception operations, the overriding soviet emphasis on deception, and our current U.S. doctrinal education system will be addressed to provide an answer and recommendations to the question posed by the study title.



Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

## TABLE OF CONTENTS

	Page
ABSTRACT. . . . .	ii
CHAPTER I. INTRODUCTION. . . . .	1
II. DOCTRINAL BACKGROUND. . . . .	3
III. HISTORICAL PERSPECTIVE. . . . .	12
IV. CURRENT SOVIET SITUATION. . . . .	21
V. TECHNICAL IMPERATIVES . . . . .	25
VI. PRESENT AND FUTURE ISSUES . . . . .	31
VII. CONCLUSIONS . . . . .	35
VIII. RECOMMENDATIONS . . . . .	37
BIBLIOGRAPHY. . . . .	39

# DECEPTION OPERATIONS: DOCTRINAL SIDE SHOW OR OPERATIONAL IMPERATIVE

## CHAPTER I

### INTRODUCTION

The purpose of this discourse is to examine Deception Operations and to determine whether their use should be a doctrinal imperative for U.S. Military Forces at the operational level of war. The discussion is focused at the operational level of war, as it is this level of warfare that ultimately determines whether strategic national objectives are achievable.

Over the last ten years, initiatives at both the Department of Defense and Department of the Army levels have attempted to encourage a resurgence within the U.S. military in the Art of Deception as a sustained war-fighting capability. This has seen an increased emphasis on deception in both doctrinal literature and in expanded coverage at our professional military institutions.

Even though our military has a current obsession with the tenets of the renowned military theorist, Karl von Clausewitz, his thoughts on the subject of deception in war were not at all favorable.

To prepare a sham action with efficient thoroughness to impress an enemy requires a considerable expenditure of time and effort, and the costs increase with scale of

the deception. Normally they call for more than can be spared, and consequently so-called strategic feints rarely have the desired effect. It is dangerous, in fact, to use substantial forces over any length of time merely to create an illusion; there is always the risk that nothing will be gained and that the troops deployed will not be available when they are really needed.

If the eminent Clausewitz is correct in his assessment of the value of deception in war, then mankind's history of warfare and our own nation's contributions to the art of deception must be suspect. This study will address the validity of that assessment, in light of both the doctrinal and historical basis for our increased emphasis on deception operations.

Unfortunately, our overall track record demonstrates a marked tendency by American Generals to ignore deceit as a tool of war and to rely instead on the frontal assault and pure 'brute force.' We only have to look at the copious examples provided by Grant, Pershing, Patton, Ridgeway, and Westmoreland to recall that most of our victories have been won with superior manpower, equipment, firepower, materiel sustainment, and the lives of many young Americans. This belies the fact that throughout history, deception operations have saved time, lives, and resources; leading to decisive victories, that often culminated in successful campaigns.

## CHAPTER I ENDNOTES

1. Carl von Clausewitz, On War, ed. and trans. by Michael Howard and Peter Paret, p. 203.



## CHAPTER II

### DOCTRINAL BACKGROUND

The primary purpose of deception is to gain an advantage of position or strength over an opponent. Or more to the point

Deception can be defined as a purposeful attempt by the deceiver to manipulate the perceptions of the target's decision makers in order to gain a competitive advantage.<sup>1</sup>

However, it must be clear that the ultimate aim of the deceiver, at the operational level of war, is to focus his opponents actions towards what he wants him to do in a given situation, and not towards what he wants him to believe. The commitment of enemy forces at the wrong place and at the wrong time, for the wrong reasons is the main objective of deception at this level of war. It gives the enemy the clear opportunity to use his own actions to defeat himself.

Although U.S. Army doctrine has recently begun to stress the importance of deception in operational planning and execution (most notably, Field Manual (FM) 100-5, Operations, FM 90-2, Battlefield Deception, and FM 100-15, Corps Operations), most of our Joint doctrine on deception, except for JCS Memorandum of Policy (MOP) 116 (C), Military Deception, is still being revised and drafted.

In the Preface to the recently published FM 90-2, Battlefield Deception, the following quote from JCS MOP 116, Military Deception, is used to reinforce the importance of deception within our overall U.S. military doctrine.

Historically, military deception has proven to be of considerable value in the attainment of national

security objectives, and a fundamental consideration in the development and implementation of military strategy and tactics. Deception has been used to enhance, exaggerate, minimize, or distort capabilities and intentions, to mask deficiencies, and to otherwise cause desired appreciations where conventional military activities and security measures were unable to achieve the desired result. The development of a deception organization and the exploitation of deception opportunities are considered to be vital to national security. To develop deception capabilities, including procedures and techniques for deception staff components, it is essential that deception receive continuous command emphasis in military exercises, command post exercises, and in training operations."

This quote is particularly relevant, in that it effectively ties our doctrinal base to that of our historical perspective of deception.

Before attempting to tie deception operations into the operational level of war, we must first define some basic principles of war that are essential to understanding the concept behind this level of warfare. The principle of **Maneuver**, is the positioning of forces in an area where the enemy is weakest, in order to destroy those forces or to seize a key objective before the enemy has time to react. The principle of **Mass**, concerns the positioning of the major force at the decisive point on the battlefield. The principle of **Economy of Force**, deals with the employment of minimal force in areas that will not receive the main effort. It is essential for the successful employment of all of these principles that the enemy not know where friendly forces are concentrated nor where is the weakest link in our defense. In fact, the opposing commander must be led to believe that either our forces are evenly distributed, or that our

expected attack will come from an area in which he thinks we have concentrated our forces.

The operational level of war can be considered the link between the strategic and the tactical levels of war. It is the level at which operations are planned within a theater of war meet national strategic objectives. The operational level campaign is designed to ensure that engagements will be fought when and where an overpowering force meets a weaker enemy. If the operational level commander and his staff have done their jobs correctly, the resultant maneuver of forces should assure victory.

An excellent synopsis of the integration of operational maneuver and deception is provided early in Course 3, Joint Forces, Doctrine, and Planning, at the U.S. Army War College

In operational maneuver, commanders try to secure favorable terms of battle by obtaining advantages of position or strength. To do so, they shift directions of movements, change dispositions, probe and feint, throw obstacles in the enemy's path, and, at the best opportunity, mass and commit their forces to battle. In open warfare, this may entail movement of the entire force. In static situations, it involves deception, detailed preparations and rapidly concentrating forces just before battle.<sup>3</sup>

From the above, it is obvious that, speed, surprise and multiple avenues to the objective are crucial to the success of operational maneuver. Surprise and the availability of numerous cleared routes are created through the use of deceptive techniques; there can be no operational maneuver without some measure of deception.

At the operational level of war, commanders often make use of the indirect approach to achieve their objectives, that is, to be accomplished by direct frontal assault. In order to ensure that the most force is at the decisive point, commanders must induce the enemy into placing his resources in the wrong area of the theater or to commit them at the wrong place at the wrong time. The aim is to face the enemy with several alternatives, of which only one is correct. Deception forces the enemy to either make the wrong choice, or causes so much ambiguity that he does not react in time to affect the outcome.

One of the world's foremost modern military strategists was Sir Basil Liddell Hart, who would have concurred with these conclusions, as he stated that: "Time and surprise are the two most vital elements in war."<sup>4</sup> He further expounded on his basic premise that: "The history of strategy is, fundamentally, a record of the application and evolution of the indirect approach.... As in war, the aim is to weaken resistance before attempting to overcome it; and the effect is best attained by drawing the other party out of his defences."<sup>5</sup>

Mao Tse-Tung, no small military strategist in his own right, was a master of the indirect approach. Even though his view was for a long-term or protracted war rather than our Western short-term solution, he did not discount deception as a military consideration. Mao clearly grasped the value of deceptive techniques, as is evident from the following quote from his theories on protracted war.

To achieve victory we must as far as possible make the enemy blind and deaf by sealing his eyes and ears, and

drive his commanders to distraction by creating confusion in their minds."

At the strategic and operational level of war, deception is most commonly associated with the achievement of surprise. While total surprise is difficult to achieve, it is only necessary to cast enough doubt and ambiguity so that the opposition cannot react effectively to counter friendly actions. Surprise without the use of deception is increasingly rare in modern times due to the increasingly sophisticated detection and collection assets available.

Nevertheless, studies and academic research of 93 strategic military battles from 1914 to 1973 have revealed that 82% of these battles involved deception operations.<sup>7</sup> Further evaluation disclosed that there is a 93% probability of achieving victory when the enemy is surprised, however, there is only a 50% surety of victory without the element of surprise; even though the attacker holds the initiative.<sup>8</sup> Likewise, the likelihood of achieving surprise without the use of deception is rated at 65%, while it is 100% assured that it will occur with it.<sup>9</sup>

The last Great Captain, and the only one to have emerged from the Twentieth Century, was General of the Armies, Douglas MacArthur. According to him, "Surprise is the most vital element for success in war."<sup>10</sup>

A well known, contemporary military theorist, Colonel T.N. Dupuy, has some rather strong beliefs of his own about the element of surprise in war: "Surprise has proven to be the greatest of all combat multipliers. It may be the most important

of the Principles of War: it is at least as important as Mass and Maneuver."<sup>11</sup>

Martin van Creveld, another current military theoretician, also has some convincing thoughts on the importance of the indirect approach in war, and the value of deception to the achievement of surprise.

...war differs from the physical world which constitutes the foundation of technology precisely in that two plus two do not necessarily equal four, and that the shortest line between two points is not necessarily a straight one. On the contrary, the more evenly balanced the opponents the more important it is to take the line least expected. That line may well prove to be not the shortest but the longest one between two points; the long line becoming the shortest because the enemy considers it the longest, and vice versa. This is not to say that "technological" considerations such as the length of the road, the difficulty of the terrain, and so on do not play an important role in war, much less that no such thing as "objective" reality exists. What it does mean, however, is that in a direct contest such as war the "objective" length of the route often counts for little. What matters, instead, is the ability to cheat and deceive, to turn the expected into the unexpected and the unexpected into the expected. Victory is achieved by appearing like a thunderbolt at the right time and place, taking the enemy by surprise.<sup>12</sup>

British Field Marshal Viscount Slim put it even more succinctly when he stated his view of the ultimate purpose of military operations.

Hit the other fellow  
As quick as you can,  
As hard as you can,  
Where it hurts him the most,  
When he isn't looking.<sup>13</sup>

However, deception plans, like campaign plans, take time to develop. Their aim is to keep the opponent off balance, by conditioning him to react to external stimuli, and keeping him

confused. To do this effectively, all of the ramifications and second and third order effects must be worked out beforehand. This includes their synchronization with strategic policy guidance, and the conscious decision on whether or not to expose sensitive deceptive technologies to attain the desired results.

As operational deception must often support future, as well as current operations, sustaining the deception story and synchronizing the timing of the many friendly elements that support that story are major challenges for deception planners. Because of the scale and broad scope of operational deception, it requires feeding false information across the enemy echelons of command and to multiple intelligence collection means. This level of effort usually requires careful coordination and synchronization with national and alliance strategic assets.

From the foregoing, it is clear that the simpler and more plausible the deception plan, the easier it will be to execute, and the quicker it will be accepted as confirming the opposition's expectations.

From the organizational perspective, within U.S. forces, deception functions are the responsibility of the 3. or Operations Officer. He is the principal staff officer charged with carrying out the organization commander's guidance and directions regarding operational planning and execution. This does not absolve the commander from being responsible for the success or failure of the deception operation, it merely focuses the staff responsibility. JCS PUB 4, Organization and Functions of the Joint Chiefs of Staff, firmly establishes responsibility

with the J3 for the staffing of a Deception Cell within the Joint Staff.<sup>14</sup> While the Army's FM 100-5, Operations, clearly tasks the G3 with the responsibility of planning and conducting deception operations within the framework of Airland Battle Doctrine.<sup>15</sup>



## CHAPTER II

### ENDNOTES

1. Michael I. Handel, Military Deception in Peace and War, p. 7.
2. U.S. Department of the Army, Army Regulation 90-2, p. iii.
3. LTC L.D. Holder, "A New Day for Operational Art", Army, March 1985, reprinted in USAWC Selected Readings AY 89 - Course 3, Joint Forces, Doctrine, and Planning, vol I., p. 6.
4. B. H. Liddell Hart, Strategy, 2d ed., p. 54.
5. Ibid., p. 18.
6. Mao Tse-Tung, Selected Military Writings of Mao Tse-Tung, p. 83.
7. Ronald G. Sherwin and Barton Whaley, "Understanding Strategic Deception: An Analysis of 93 Cases," in Strategic Military Deception, eds. Donald C. Daniel and Katherine L. Herbig, P. 185.
8. Ibid., P. 189.
9. Ibid., p. 187.
10. Douglas MacArthur, Reminiscences, p. 349.
11. Trevor N. Dupuy, Understanding War: History and Theory of Combat, p. 6.
12. Martin van Creveld, Technology and War, p. 317-318.
13. U.S. Department of the Army, Field Manual 100-5, p. 94 (hereafter referred to as "FM 100-5").
14. U.S. Joint Chiefs of Staff, JCS Pub 4, p. 3-21.
15. FM 100-5, p. 53.

## CHAPTER III

### HISTORICAL PERSPECTIVE

As early as 500 B.C., Sun Tzu, the Classical Chinese military theoretician, stressed among his practical and philosophical fundamentals of war that,

**All warfare is based on deception.** Hence, when able to attack, we must seem unable; when using our forces, we must seem inactive; when we are near, we must make the enemy believe that we are away; when far away, we must make him believe we are near. Hold out baits to entice the enemy. Feign disorder, and crush him.<sup>1</sup>

The story of the Trojan Horse has come down to us through the mists of time, and is one of the earliest examples of the effectiveness of deception on a grand scale. Furthermore, all of the Great Captains of History (Alexander, Hannibal, Caesar, Genghis Khan, Gustavus Adolphus, Frederick the Great, Napoleon, Robert E. Lee, and Douglas MacArthur), were renowned for routinely incorporating deception into their operational plans and orders.

Even George Washington, the 'Father of Our Country,' was not above using deception, as he did quite effectively during our Revolutionary War, at Trenton, Princeton, and Yorktown. The protracted Indian Wars, along our expanding frontier, were replete with deceptive activities resorted to by both sides. Likewise, our Civil War saw both protagonists effectively use deceptive tactics and strategies.

Confederate Major General John Magruder's masterful deceptive defense of "The Peninsula" in April 1862, against

General George B. McClellan's overwhelmingly superior Army of the Potomac was almost flawless. His performance gave the South the month it desperately needed to gather the Army of Northern Virginia to defend it's capital. Similarly, General William T. Sherman's large-scale deception outside Atlanta allowed him to outflank, and out-general the well-intrenched Confederate forces of General John B. Hood. Thereafter, Atlanta fell in less than four days. General Thomas J. 'Stonewall' Jackson's famous Shenandoah Valley Campaign, in the Spring of 1862, was one of the most brilliant diversionary campaigns in military history, and mark him as one of the foremost practitioners of battlefield deception in the annals of American warfare. One of Jackson's most well-known 'maxims of war' was to:

Always mystify, mislead, and surprise the enemy, if possible; and when you strike and overcome him, never give up the pursuit as long as your men have strength to follow, for an Army routed, if hotly pursued, becomes panic stricken, and can then be destroyed by half their number.<sup>2</sup>

Jackson's maxim is very similar to that espoused in 1645 by Miyamoto Musashi, one of Japan's most renowned warriors and strategists. It is interesting to note the analogy between these two approaches and Sun Tzu, as they were conceived in three such disparate cultures, times, and backgrounds. Hence, the incontrovertible universality of their theme should be obvious to even the most indifferent observer.

In large-scale strategy it is important to cause loss of balance. Attack without warning where the enemy is not expecting it, and while his spirit is undecided follow up your advantage and, having the lead, defeat him. We can use our troops to confuse the enemy on the field. Observing the enemy's spirit, we can make him

think. "Here? There? Like that? Like this? Slow? Fast?" Victory is certain when the enemy is caught up in a rhythm which confuses his spirit. This is the essence of fighting, and you must research it deeply.<sup>3</sup>

During World War I, the success of General Sir Edmund H. H. Allenby's brilliant deception culminated in British victory in the Palestine Campaign. Without the foundation of misinformation planted in the mind of the chief German adviser to the Turks, by a deliberately lost haversack, Allenby's forces would not have been able to rapidly crack the Gaza-Beersheba Line and drive on to capture Jerusalem. Likewise, General John J. Pershing, who usually followed the straightforward **military approach**, successfully planned and executed the Belfort Ruse prior to the U.S. attack of the St. Mihiel salient. This drew off 36,000 men from the battle area into the sector opposite the Belfort Gap; 125 miles to the southeast of St. Mihiel. In justifying to the German High Command why three additional divisions were needed to cover the Belfort Gap, a German General Staff Officer made the following explanation: "I realize quite fully that all these preparations being made for attack may perfectly well turn out to be a 'ruse de guerre' intended to mislead us as to the real point of attack. However, there is nothing to indicate that it is not the real point of attack and our danger there is so great that I deem it imperative to have these divisions."<sup>4</sup> This is the consummate justification for why deception operations are such a fundamental and inherent element of warfare; to confuse and mislead the enemy as to actual friendly intentions.

Prior to the advent of World War II, there was a generally held belief that deception would not be as effective in the future, as in World War I, because of the significant advance in the science of war. How wrong those prognosticators were.

An excellent early example of the successful use of operational deception in modern times occurred in 1939, along the Khalkhin-Gol River in Mongolia, during the border clash between Soviet and Japanese forces. Marshal Georgi K. Zhukov, the Front Commander, described his deception activities then, as follows:

In order to delude the enemy about their real plans, the Soviet-Mongolian forces made wide use of false information. False reports concerning construction of defensive works and inquiries regarding engineer equipment were transmitted. A powerful sound-effects set brought to the front imitated the sound of pile driving, creating the perfect impression of considerable defensive works under construction. All troop movements were carried out only at night. The noise of tanks massing on departure positions for the attack was drowned out by night bomber raids and by small-arms fire. For ten to twelve days before the attack several tanks with mufflers removed constantly drove back and forth along the front. This was done so that the Japanese, having grown accustomed to the sound of our vehicles as an everyday occurrence, would be absolutely disoriented at the moment of the Soviet-Mongolian attack. With this objective, systematic daylight and night sorties were carried out by our aviation.<sup>5</sup>

World War II provided a rich smorgasbord of large scale deception operations, which were conducted by all participants. On the Axis side, to name but a few of the most notable, there were: the German invasions of Poland, Norway, France, Belgium, and Russia; the Japanese attacks on Pearl Harbor and Singapore; the Italian deception of the Germans about their own military capabilities; and the German surprise attack at the Battle of the Bulge. On the Allied side, in Europe, there were major deception

operations to support: the invasions of North Africa, Sicily, Anzio, and Normandy; the air Battle over Britain; the battle of El Alamein, and the breaching of the Gothic Line; while on the Russian side of the war, there was kursk, Stalingrad, and the Belorussian Campaigns.

In the Pacific, Allied deception did not attain the same level of success. While the Kurile Islands operation attained mixed results, those at Midway, Tinian, and on Okinawa, when the Shuri Line was turned, were resounding successes. Except for Midway, none influenced the outcome of the war in the Pacific as significantly as those in Europe did in that theater. Although it can be said, that the bluff run by President Truman to get the Japanese to surrender, after we had dropped our only two available Atomic bombs, was the most effective deception of the war.

Nevertheless, most Westerners regard Normandy as the largest, most sophisticated, and successful deception operation of World War II, being unequaled in its scope and effectiveness; not only on achieving its immediate ends, but in leading directly to the rapid end of the war in Europe. In fact, John Baker White, an English psychological warfare expert, wrote: "My appreciation at that time was that 'Operation Fortitude' (the Normandy Invasion) had been an eighty per cent success, and I have not changed my mind since. It was the greatest deception operation in the history of war, and there may never be a greater."\*

The complacency of the postwar years allowed the U.S. to be lulled into a false sense of security in the Far East, which the North Korean Army quickly exploited in the summer of 1950. However, other than MacArthur's brilliant landing at Inchon, there was but one other major deception operation of the Korean War: the intervention of Chinese Communist Forces (CCF) in November 1950. As U.N. forces had total air and naval superiority, and were rapidly pushing the retreating North Korean Army towards the Manchurian Border, the sudden appearance of 300,000 Chinese soldiers came as a total surprise. Apparently overnight, the CCF rose out of the frozen hills and ridges of North Korea to shatter the advance of the shocked Eighth Army and push them back to a line well below Seoul. How was this accomplished, against the superior observation afforded by the U.N. air forces?

T.R. Fehrenbach, in his brilliant book, This Kind of War, eloquently explained how this illiterate, simple peasant army, with little mechanization, and limited military hardware, was able to deceive the most modern, technologically adept army of its day.

The example of one Chinese army, which marched from Antung, Manchuria, to its assembly area in North Korea almost three hundred miles away, explains much: after dark, not sooner than nine o'clock, the Chinese troops began to march. Singing and chanting in the manner of all Chinese, they plodded south, night after night, for eighteen nights.

And each night, between nine and three, they covered eighteen miles.

When light came, every man, every gun, every animal, was hidden from sight. In the deep valleys, in the thick forests, in the miserable villages huddled on the forlorn plateaus, the Chinese rested by day. Only small scouting parties went ahead by day to reconnoiter

the night's march, and to select the bivouac for the morrow. If aircraft were heard, each man was under orders to halt, freezing in his tracks, until the noise of the engine went away.

In bivouac, no man showed himself, for any reason. Discipline was firm, and perfect. Any man who violated instructions in any way was shot.

It was not only cunning and hardihood, but this perfect march and bivouac discipline that caused U.N. aircraft to fly over the CCF hundreds of times without ever once seeing anything suspicious. Even aerial photography revealed nothing.<sup>7</sup>

In addition, the limited CCF vehicles were either camouflaged by day or hidden in the many railroad tunnels, or under bridges. When forced to move by day, Chinese soldiers carried straw mats on their backs. As soon as their advanced scouts in the hills heard the sound of an aircraft engine, they would fire a warning shot. By the time U.N. air observers came overhead, the prone troops resembled recently cut crops in the fields.

Similar tactics were later used effectively by the Viet Minh against the French at Dien Bien Phu, as they were able to so well camouflage their gun positions, camps, and resupply routes, that they were rendered invisible to both French aerial observation and ground reconnaissance. After the French defeat, General Giap was to state simply, that despite the total air dominance enjoyed by the French. "We did construct our supply roads; our soldiers knew well the art of camouflage, and we succeeded in getting our supplies through."<sup>8</sup> This was later to become a staple tactic of the North Vietnamese Army in moving men and supplies along the 'Ho Chi Minh Trail' during the Vietnam War.



During the Chinese Civil War, from 1945 to 1949, the Communist Chinese used deception quite effectively against the more numerous and better equipped Nationalist armies. Deception was used primarily by the Communists to conserve resources, reduce losses, and maximize the destruction of Nationalist forces at the time and place of their choosing. In the later case, they were eminently successful.

The Arab-Israeli Wars, from 1948 to 1973, were characterized by a significant reliance on the indirect approach and on deception to obtain operational results. Throughout this period deception was usually initiated by Israeli forces, as in the superbly executed Six Day War in 1967. However, in the 1973 Yom Kippur War, the initial success of the Egyptians and Syrians was the direct result of a highly sophisticated and successful Arab deception plan.

Although there was no operational deception exercised during the Battle for the Falklands in 1982, between Great Britain and Argentina, there were some tactical deception initiatives. The most startling factor, however, was how ineffective satellite surveillance was throughout the 2 1/2 month conflict. In fact, "Satellite photo-reconnaissance played virtually no part in the Falklands crisis: American Landsat pictures were of such poor quality that Washington actually showed them to the Argentinians to prove they were not helping the British."<sup>9</sup>

It is evident from the plethora of examples presented, that deception in war must be considered a judicious and essential activity, because it is such a tremendous force multiplier. When

all other factors of strength are equal, the use of deception further amplifies the available strength of one side over the other by allowing it to use its forces more efficiently, at the time and place of its choosing.

### CHAPTER III

#### ENDNOTES

1. Sun Tzu. The Art of War, translated by Samuel B. Griffith. p. 66.
2. Colonel G.F.R. Henderson. Stonewall Jackson and the American Civil War. p. 420.
3. Miyamoto Musashi. A Book of Five Rings, translated by Victor Harris. pp. 77-79.
4. The Editors of Army Times. The Tangled Web, p. 74.
5. Otto Preston Chaney, Jr., Zhukov, p. 53.
6. The Editors of Army Times, p. 147.
7. T.R. Fehrenbach. This Kind of War, p. 291.
8. Bernard B. Fall. Hell in a very Small Place, p. 133.
9. Max Hastings and Simon Jenkins. The Battle for the Falklands, p. 58.

## CHAPTER IV

### CURRENT SOVIET SITUATION

It is difficult for Westerners to grasp the rationale of Soviet conduct, but it is next to impossible for Communists to grasp the purpose of Western policy however explicit it may be in words and deeds. The Communist mind has so defined its world that it shares neither truth nor logic nor morality with the rest of mankind.<sup>1</sup>

Secrecy, deception, and disinformation are deeply ingrained characteristics of the Soviet national system and of its overall approach to the rest of the world. Using deception to achieve surprise is standard Soviet doctrine and practice. Soviet military literature even discusses the use of disinformation, concealment of preparatory measures from modern surveillance means, and deceptive obscurity as important measures to be taken to obtain surprise.<sup>2</sup>

The Soviet military term that comes closest to the Western concept of deception, is **maskirovka**. The Soviet concept is, however, broader in scope, encompassing all military measures to deny or degrade useful information to foreign intelligence services. It includes: camouflage, concealment, demonstrations, simulations, and disinformation.<sup>3</sup>

In order to centralize the military deception structure, a Chief Directorate of Strategic **Maskirovka** was formed within the Soviet General Staff, according to a former Soviet military intelligence officer who defected to the West. Responsibilities of this Directorate include: running all military newspapers and journals, relations with foreign military attaches, orchestrating

international arms negotiations, and supervising all military parades.<sup>4</sup> The effectiveness of this latter function is well documented by their 1955 Air Force Day ceremonies, in which their heavy bombers flew over the reviewing stands repeatedly, thereby creating a nonexistent "bomber gap" over the U.S. Strategic Air Command.<sup>5</sup> The Directorate is also supposedly charged with coordinating a massive distortion effort for all Soviet forces, that includes special electronic deception units that transmit bogus signals, aimed at deceiving Western reconnaissance satellites.<sup>6</sup>

The term **maskirovka** is not used, however, by the Soviet KGB, which uses the term **aktivnyye meropriyatiya** (active measures), to denote a wide variety of deceptive techniques to advance foreign policy goals and objectives. While not a pure intelligence activity, active measures include: disinformation, forgeries, foreign agents of influence, and covert press influence. Other branches of the Soviet government play essential roles in implementing active measures in foreign countries through propaganda and political agitation activities.<sup>7</sup> Thus, it appears that the Soviet Union does not have a single, national concept for deception.

Nevertheless, the Soviet Union has not been exactly quiescent since the end of World War II. Its invasions of Hungary in 1956, Czechoslovakia in 1968, and, most recently, Afghanistan in 1979, were all preceded by deliberate deception activities that achieved both strategic and operational surprise. These deception activities were aimed at weakening any resistance and

to desensitize or condition the invaded peoples to the threat of a Soviet invasion. Their objectives were obtained in all three cases. Of course, there is also the case of the Cuban Missile Crisis, in which aerial surveillance technology, coupled with a 'gutsy' U.S. President, effectively countered Soviet deception efforts and caused them to pull their missiles out of Cuba.

The Soviet Union has also been quite active in formulating "people's revolutions" throughout the Third World. Of particular note to the U.S., were the revolutions in Cuba and Nicaragua. The key question for the Soviets, was how to establish total Communist control, when most of the support had to come from non-Communist sources? The solution arrived at was to deceive the revolutions' supporters as to the true Communist leanings of the guerrilla leaders until after they were able to consolidate their power. By that time, the indigenous anti-Communist forces were too unorganized to be effective, and the U.S. was unwilling to commit military forces to do so; for fear of international censure and domestic opposition. In both cases, the bait was swallowed whole, and we have been living with the results of our gullibility ever since.

The Soviet Union continues to rely heavily on deception in their routine training exercises. The 21 September 1988 issue of the military daily newspaper, Krasnaya Zvezda, stressed that the use of **maskirovka** (deception), and **razvedka** (intelligence), were important elements in Soviet tactical and operational doctrine. The article went on to give examples of their use in the recently conducted Fall '88 exercises in the Ukraine and Moldavia, which

were closely observed by Warsaw Pact Ministers of Defense and General Officers."

## CHAPTER IV

### ENDNOTES

1. Robert Bathurst, "On Soviet Linguistics: Expropriating Utopia," in Soviet Strategic Deception, eds. Brian D. Dailey and Patrick J. Parker, p. 104.
2. U.S. Army Intelligence Agency, Soviet Battlefield Development Plan, Vol. 1: Soviet General Doctrine for War (U), p. 2-23.
3. U.S. Central Intelligence Agency, Office of Research and Development, Glossary of Camouflage, Concealment, Deception and Security Terminology, pp. 114-117.
4. Viktor Suvurov, Inside the Soviet Army, pp. 102-105.
5. Michael I. Handel, Military Deception in Peace and War, p. 20.
6. Suvurov, pp. 106-107.
7. Richard J. Heuer, Jr., "Soviet Organization and Doctrine for Strategic Deception," in Soviet Strategic Deception, eds. Brian D. Dailey and Patrick J. Parker, pp. 23-31.
8. Peter Adams, "September Exercises Stress Deception, Intelligence," Army Times, 14 November 1988, p. 25.

## CHAPTER V

### TECHNOLOGICAL IMPERATIVES

Martin van Creveld, in his illuminating and well constructed work, Technology and War, presented an excellent perspective on the interplay between technology and the Art of War.

War, far from being an exercise in technology, is primarily a contest between two belligerents. With each side seeking to achieve his objectives while preventing the other from doing the same, war consists in large part of an interplay of double-crosses. The underlying logic of war is, therefore, not linear but paradoxical. The same action will not always lead to the same result. The opposite, indeed, is closer to the truth. Given an opponent who is capable of learning, a very real danger exists that an action will not succeed twice **because** it has succeeded once.<sup>1</sup>

Since technology and war operate on a logic which is not only different but actually opposed, nothing is less conducive to victory in war than to wage it on technological principles - an approach which, in the name of operations research, systems analysis, or cost/benefit calculation (or obtaining the biggest bang for the buck), treats war merely as an extension of technology.<sup>2</sup>

The advance of technology invariably breeds complexity, which, in turn, leads to the proliferation of technicians. Unique knowledge of their field of endeavor gives these specialists power over those without their singular understanding of the most modern technology. This, in turn, produces conflict between the technicians and those current leaders who would use these new advancements. The technicians tend to jealously guard their special information by restricting access and compartmenting the detailed facts to only those with a need to

know: i.e. other technicians. Our current intelligence services are a perfect case in point.

Within the intelligence community, there is a pervasive tendency to overrely on technology to provide all of the answers to intelligence analysts' questions. There is such a proliferation of intelligence data available, that sifting through the volume of information available to all of the separate intelligence assets and agencies, and collating only that necessary for a specific leader to make a decision, is close to impossible. Too much information, from too many sources, may well overload the system. Anomalies are therefore, either overlooked or evaluated as a system/electronics error. Couple this, with the fact that intelligence analysts have a distinct proclivity to exaggerate enemy strengths and capabilities, and you provide extremely fertile ground in which to plant the seeds of deception.

A study of intelligence assessments prior to the two world wars, reveals that the governments of our time may be less well served than those before World War I.

They can count missiles, bombers, carriers, submarines, and armored divisions at least as precisely as governments before 1914 could count guns, horses, and dreadnoughts; but now, as then, no one can be confident what the totals signify. With many of the new weapons unproven in combat, intelligence analysts, staff officers, and decision-makers have to rely on imagination rather than experience to assess capabilities.<sup>9</sup>

This assessment of enemy capabilities may well be exacerbated by planted disinformation regarding the actual capabilities of an opponent's weapons systems.



The U.S. Defense Department has a propensity to insist upon quantifying the Art of War so that a computer simulation can absorb many diverse factors and arrive at a solution upon which military decision makers can base a decision. Whether it be to procure improved weapons systems, to calculate the sustainability of one course of action over another, or to determine the appropriate force mix necessary to defeat a specific enemy threat, the Pentagon analysts want to be able to measure every facet of information available to them.

Deception operations are not easily quantifiable. Therefore, Operations Research Systems Analysts (ORSAs) have generally been unable to effectively deal with deception. As it cannot be easily modeled or readily entered as a numerical quotient into a set formula for quantitative analysis, deception has heretofore not been considered a factor in the numerous Department of Defense wargames and simulations, executed over the last forty-odd years. If we are to have a valid deception doctrine, then it is imperative that we be able to successfully model our deception plans and operations in our military simulations and wargames.

We must also be able to adapt our methods of deception, based on both the current and anticipated changes in technology. Even a cursory look at the military conflicts of this century can discern how the military technologies of the times were targeted by the deceivers.

From World War I to date, to have a hope of pulling off an effective deception operation, it has become a basic necessity

of modern armys to mislead enemy aerial surveillance. Since well before World War II, communications and electronic surveillance have become essential targets for misdirection. Satellite surveillance has been a factor since the Vietnam War, and plays a progressively more crucial role in both the world's intelligence and communications communities. High-speed computers have also added a whole new dimension to the rapid sorting and collation of intelligence information. However, the interpretation of that data and the decisions made based on those analyses must still rest with commanders.

The Department of Defense recently prepared a report to the Congressional Armed Services Committees that listed 22 technologies that were considered critical to the long-term superiority of U.S. weapons systems. Of these technologies, over half have deceptive applications. A brief listing and explanation of these critical technologies is as follows:

1. **Microelectronic circuits:** miniaturizes electronics.
2. **Preparation of gallium arsenide, or GaAs:** increases semiconductors' ability to conduct electricity. Semiconductors are critical to electronic warfare and communications equipment.
3. **Software production:** a key element in every computer-driven system.
4. **Parallel computer architectures:** increases capabilities of military computer hardware.
5. **Machine intelligence/robotics:** to relieve people in dangerous situations.
6. **Simulation and modeling:** computer evaluations of military situations and equipment system performance.
7. **Integrated optics:** to improve electronic warfare, sensor and communication capabilities.
8. **Fiber optics:** to improve surveillance, and undersea and missile targeting.
9. **Sensitive radar:** to detect and identify stealth aircraft.
10. **Passive sensors:** to detect infrared, visible and ultraviolet light, as well as X-rays. This will improve detection, identification and tracking systems.

11. **Automatic target recognition:** to automatically identify and classify targets.
12. **Phased arrays:** signal processing technology that enhances detection ability.
13. **Data fusion:** data-processing technology that improves command, control and communications, as well as, battle management.
14. **Signature control:** to reduce detectable systems characteristics.<sup>4</sup>

One additional area of technology that does need some immediate, serious, detailed attention, is in improving our ability to deceive Soviet intelligence in, from, and about space. Outgoing Secretary Frank C. Carlucci warned in his January 1989 Report to Congress, that, "The U.S. intelligence community has conclusive evidence that the Soviets maintain their operational coorbital antisatellite (ASAT) capabilities in a constant state of readiness."<sup>5</sup> Since we currently do not have the ability to physically protect our sensitive communications, navigation, and intelligence satellites, a valid deception scheme may well be their only protection.

What experience has unfortunately shown us about technological deception, is that gains are generally short-lived. As opponents invariably, either quickly develop counter-deception technologies, or simply adjust their operations to work around the technological advantage of the deceiver. Therefore, the decision on whether or not to expose sensitive deceptive technologies, to obtain a desired operational results, must be very deliberate and considerate, because the techniques may well not work a second time.

## CHAPTER V

### ENDNOTES

1. Martin van Creveld, Technology and War, p. 316.
2. Ibid., p. 319.
3. Gordon A. Craig and Felix Gilbert, "Reflection on Strategy in the Present and Future," in Makers of Modern Strategy, ed. Peter Paret, p. 866.
4. "Pentagon Reviews Critical Technologies," Army Times, 3 April 1989, p. 31.
5. Robert R. Ropelewski, "Carlucci Boosts Competitive Strategies. Assails Congress' Micromanagement," Armed Forces Journal International, March 1989, p. 19.

## CHAPTER VI

### PRESENT AND FUTURE ISSUES

The last ten years. have seen an increased emphasis on deception in our joint and service doctrinal literature, as well as. in expanded coverage at our professional military institutions. Even though the implementation of that doctrine within our military force structure is just seeing a resurgence, the manner in which that doctrine is currently packaged and presented in our military education system is destined to shortly relegate deception back to the doctrinal doldrums.

For example, FM 90-2, Operational Deception, while quite comprehensive, is replete with deception activities charts, checklists, implementation schedules, fill-in-the-blanks worksheets, and matrices. Instead of focusing on a doctrinal framework in which well-considered decisions about deception can be made and plans executed, our doctrine writers have focused on the "shake and bake" or "plug and chug" solutions to be found in matrix responses to given situations. They have ignored the very basic tenets of Clausewitz's principles of war. He could have been specifically addressing their attempts to solidify deception doctrine, when he wrote:

It is only analytically that these attempts at theory can be called advances in the realm of truth; synthetically, in the rules and regulations they offer, they are absolutely useless.

They aim at fixed values; but in war everything is uncertain, and calculations have to be made with variable quantities.

They direct the inquiry exclusively toward the physical quantities, whereas all military action is intertwined with psychological forces and effects.

They consider only unilateral action, whereas war consists of a continuous interaction of opposites.<sup>1</sup>

Notwithstanding the recent proliferation of deception terminology within their military lexicon, many U.S. officers continue to view deception as taking unfair advantage of an honorable opponent; therefore, another form of cheating, and not an ethical subject to be discussed among gentlemen. These ethical values are significantly different than those held by the Soviets, as expressed in Chapter IV. In addition, "The deeply rooted belief that all civilized people (including the Russians) value honesty makes the Americans particularly susceptible to a well-orchestrated and carried out Russian program of lying and deception, especially in peacetime."<sup>2</sup>

Over the last four decades, American intelligence has an abysmal record of anticipating new Soviet actions. Notwithstanding that both past and current Soviet doctrine emphasize the necessity of strategic, operational, and tactical surprise, based upon deception and disinformation. For our national security apparatus to continue to ignore this basic fact, and emphatically insist that sufficient warning will exist of any Soviet attack, is not only ludicrous, but criminally negligent. We must expect, instead, for deliberate, detailed Soviet deception to cause ambiguity and confusion within our intelligence community, especially in situations that requires prompt, decisive action on our part.

Even with the advent of space-based communications platforms, aerial and remote sensors, and high speed computer systems to speed warnings of hostile intent, a surprise attack against U.S. forces could be successfully accomplished, because of the ambiguity caused by deception. U.S. intelligence does not habitually report or warn until it has solid, tangible evidence to support it, and Soviet deception will be specifically targeted on disrupting the effectiveness of our decision cycle by inserting uncertainty into our warning systems. Our very technology makes us vulnerable to this deception, because of our overreliance on advanced warning and our disbelief in our capacity to be suprised.

History is replete with examples of leaders refusing to believe what their intelligence sources were telling them was in fact happening, because the deceived does not want to believe that he has been so wrong. Pearl Harbor, Normandy, and Operation Barbarosa (the German invasion of Russia) in World War II, are classic examples of effective surprise, despite strategic warning.

Senior U.S. commanders should expect to be the targets of some form of deception both prior to and during our next conflict. They can provide some protection for themselves and their commands by selecting and training quality personnel to fill the deception positions within their Operations Staffs (J/G3s). They also need to learn as much about deception as possible, now: how it works, how potential adversaries are likely to employ it, how to detect it, and how to reverse it back

on those who use it against us. For the side that can successfully execute a deception possesses a distinct advantage over their opponent that is obtained at relatively small cost.

## CHAPTER VI

### ENDNOTES

1. Carl von Clausewitz, On War, ed. and trans. by Michael Howard and Peter Paret, p. 136.

2. Patrick J. Parker, "Soviet Strategic Deception and U.S. Vulnerability: A Net Assessment," in Soviet Strategic Deception, eds. Brian D. Dailey and Patrick J. Parker, p. 512.



## CHAPTER VII

### CONCLUSIONS

A country that does not use deception is at a distinct disadvantage against one that does. It is like allowing the enemy to maintain the initiative, by letting him always strike the first blow. It is therefore essential, that U.S. commanders and their staffs thoroughly understand the principles, mechanics, and planning factors necessary to effectively employ deception operations prior to the start of our next conflict. Deception planning must be thoroughly integrated into the combined mission planning process (to include contingency operations planning), and with our current operational exercises, so that commanders and staffs are used to routinely considering the implications of taking such actions in the future. This will include the capability to include deception play during both modeling and simulation of operational exercises.

Additionally, the study of deception must be included in the professional curriculum provided our officers at all education levels; escalating in scope from pre-commission to general officer. While this policy is now being implement at the Senior Service and Staff College levels; similar programs are not currently established at the other, lower level, professional schools. Providing regular instruction in deception operations would also produce the added value of making our officers more aware of the effect that enemy deception and surprise can cause to our own plans. We must be able to anticipate the actions of

our adversaries, both to forestall his deceptive activities and to further our own, for U.S. officers have an unfortunate proclivity for downplaying our opponent's intellect.

Niccol'o Machiavelli, the great Italian statesman and political pundit of the Fifteenth Century, states the situation far better than I when he pronounced in his Discourses:

Although deceit is detestable in all other thing, yet in the conduct of war it is laudable and honorable; and a commander who vanquishes an enemy by stratagem is equally praised with one who gains victory by force.<sup>1</sup>

Deception is but another arrow in a commander's quiver, but a most powerful one, at that. However, it is not a panacea to cure all of a commander's operational woes. By itself, deception cannot make up for a poor plan, or for a failure in execution that loses the initiative to the opposing side. However, if the deceptive techniques to be used are chosen carefully and synchronized with the overall operational plan, then the initiative should revert to the successful deceiver.

## CHAPTER VII

### ENDNOTES

1. Niccol'o Machiavelli, The Prince and The Discourses, p. 526.

## CHAPTER VIII

### RECOMMENDATIONS

In recapping the preceding discussion, it is clear that the U.S. Army and the Department of Defense do possess a viable doctrine of deception, and that deceptive operations are imperative for success at the operational level of war. Unfortunately, the current methods used to establish that doctrinal resurgence will not be effective in the long run, if we continue to stress Jomini's formal systems approach to deception instead of Clausewitz's flexible response, based upon the situation.

Of particular note, is the current lack of doctrinal deception instruction at all levels of officer professional education. This instruction needs to be focused on encouraging student initiative in the application of our deceptive doctrine and not around a "school solution," that changes with the Course Director.

As the implications of this renewed deception doctrine spread throughout the Department of Defense, it will soon become evident that there is no currently approved system to allow deception to be simulated during operational wargaming. This significant shortcoming needs to be resourced and corrected.

Commanders should also take special care in the staffing of the Deception Cells within their respective Operations Staffs. Instead of making this a holding ground for marginal achievers, these officers need to be the most innovative and creative

thinkers in the command. The quality of deception operations rests on the quality of the operators and planners involved.

It is imperative, that we insure that the future direction and implementation of our operational deception planning, support, and execution are fully understood throughout the U.S. defense establishment. Improving the education of our personnel, placing quality people in the deception arena, and providing planners the diagnostic tools needed to simulate deception operations in their wargaming, are three cost effective methods of proving that deception operations are not a doctrinal side show; but in fact, are an operational imperative for U.S. Military Forces.

This discourse could not close with a more appropriate quote than that recently provided by the current U.S. Army Chief of Staff, General Carl E. Vuono. "Deception is common sense soldiering."<sup>1</sup>

## CHAPTER VIII

### ENDNOTES

1. U.S. Department of the Army, Field Manual 90-2, Battlefield Deception, p. 3-1.

## BIBLIOGRAPHY

1. Adams, Peter. "September Exercises Stress Deception. Intelligence." Army Times, 14 November 1988, p. 25.
2. Carlucci, Frank C. Report of the Secretary of Defense to the Congress on the FY 1988 / Fy 1989 Biennial Budget. Washington: U.S. Government Printing Office, 18 February 1988.
3. Chaney, Otto Preston, Jr. Zhukov. Norman: University of Oklahoma Press, 1971.
4. Clausewitz, Carl von, ed. and trans. Michael Howard and Peter Paret. On War. Princeton: Princeton University Press, 1976.
5. Dailey, Brian D. and Patrick J. Parker, eds. Soviet Strategic Deception. Lexington: D.C. Heath and Company, 1987.
6. Daniel, Donald C. and Katherine L. Herbig, eds. Strategic Military Deception. New York: Pergamon Press, 1981.
7. Doughty, Major Robert A. "The Evolution of US Army Tactical Doctrine, 1946-76." Leavenworth Papers. Fort Leavenworth: Combat Studies Institute, August 1979.
8. Dupuy, Trevor N. Understanding War: History and Theory of Combat. New York: Paragon House Publishers, 1987.
9. Editors, The Army Times. The Tangled Web. Washington: Robert B. Luce, Inc., 1963.
10. Fall, Bernard B. Hell in a Very Small Place: The Siege of Dien Bien Phu. Philadelphia: J.P. Lippincott Company, 1967.
11. Fehrenbach, T. R. This Kind of War. New York: The Macmillan Company, 1963.
12. Gooch, John and Amos Perlmutter, eds. Military Deception and Strategic Surprise. London: Frank Cass and Company Limited, 1982.
13. Handel, Michael I. Military Deception in Peace and War. Jerusalem: The Magnes Press, 1985.
14. -----, Strategic and Operational Deception in the Second World War. London: Frank Cass and Company Limited, 1987.
15. Hart, B. H. Liddell. Strategy, 2d ed. New York: Frederick A. Praeger, Inc., 1968.
16. Hastings, Max and Simon Jenkins. The Battle for the Falklands. New York: W.W. Norton and Company, 1983.

17. Herzog, Chaim. The Arab-Israeli Wars. New York: Random House, 1982.
18. Henderson, Colonel G.F.R. Stonewall Jackson and the American Civil War. New York: Longmans, Green and Company, 1936.
19. Holder, LTC L.D. "A New Day for Operational Art". Army, March 1985. reprinted in USAWC Selected Readings AY 89 - Course 3, Joint Forces, Doctrine, and Planning, vol. I.
20. Jomini, Antoine Henri. The Art of War. Westport: Greenwood Press, 1969.
21. Kahn, David. Hitler's Spies. New York: MacMillan Publishing Company, Inc., 1978.
22. Love, Edmund G. "Deception on the Shuri Line." Infantry, July-August 1983, pp. 15-20.
23. MacArthur, Douglas. Reminiscences. New York: McGraw-Hill, 1964.
24. Machiavelli, Niccol'o. The Prince and The Discourses. New York: The Modern Library, 1950.
25. Mao Tse-Tung. Selected Military Writings of Mao Tse-Tung. Peking: Foreign Language Press, 1966.
26. Miyamoto Musashi, translated by Victor Harris. A Book of Five Rings. Woodstock: The Overlook Press, 1974.
27. Mure, David. Master of Deception. London: William Kimber and Company Limited, 1980.
28. "Pentagon Reviews Critical Technologies." Army Times, 3 April 1989, p. 31.
29. Ropelewski, Robert R. "Carlucci Boosts Competitive Strategies, Assails Congress' Micromanagement." Armed Forces Journal International, Vol. 126, No. 8, March 1989, pp. 19-22.
30. Sun Tzu, translated by Samuel B. Griffith. The Art of War. New York: Oxford University Press, 1973.
31. Suvurov, Viktor. Inside the Soviet Army. New York: Macmillan Publishing Co., Inc., 1982.
32. Tanner, Robert G. Stonewall in the Valley. Garden City: Doubleday and Company, Inc., 1976.

33. U.S. Army Intelligence Agency. Soviet Battlefield Development Plan, Vol. 1: Soviet General Doctrine for War (U). Washington: U.S. Army Intelligence and Threat Analysis Center. 26 June 1987.
34. U.S. Army Training and Doctrine Command. Army Lessons Learned, No. 3-88: Battlefield Deception Operations. Fort Leavenworth: The Center for Army Lessons Learned. July 1988.
35. U.S. Central Intelligence Agency. Office of Research and Development. Deception Maxims: Fact and Folklore. Princeton: Mathtech, Inc., 1980.
36. . . . Glossary of Camouflage, Concealment, Deception and Security Terminology. Princeton: Mathtech, Inc., 1981.
37. . . . Misperception Literature Survey. Princeton: Mathtech, Inc., 1979.
38. . . . Thoughts on the Cost-Effectiveness of Deception and Related Tactics in the Air War 1939 to 1945. Princeton: Mathtech, Inc., 1979.
39. U.S. Department of the Army. Field Manual(FM) 90-2: Battlefield Deception. Washington: 3 October 1988.
40. . . . FM 100-5: Operations. Washington: 5 May 1986.
41. . . . FM 100-6(Coordinating Draft): Large Unit Operations. Fort Leavenworth: 30 September 1987.
42. U.S. Department of Defense. Soviet Military Power: An Assessment of the Threat, 1988. Washington: April 1988.
43. U.S. Joint Chiefs of Staff. JCS Pub 4: Organization and Functions of the Joint Chiefs of Staff. Washington: August 1985.
44. . . . United States Military Posture for FY 1989. Washington: U.S. Department of Defense, 1988.
45. Van Creveld, Martin. Technology and War. New York: The Free Press, 1989.
46. Wakin, Malham M., ed. War, Morality, and the Military Profession. Boulder: Westview Press, Inc., 1986.
47. Weigley, Russel F. The American Way of War: A History of United States Military Strategy and Policy. Bloomington: Indiana University Press, 1977.